

WebQuest #2: Cell Division

Today's quest takes us on a tour of cell division. Each of you needs to complete this by Thursday (just like last week). Remember, don't trust the first website you find, use more than one!

Task #1: Interphase

Go to http://library.thinkquest.org/C004535/interphase_.html and read the information there regarding the 3 stages of interphase. Produce a pie graph of the amount of time (estimated) that a cell spends in each phase. Why do we need to copy the DNA in Interphase? (look it up!) What might happen if we did not do this?

Task #2: Prophase

Why does the nuclear membrane dissolve during prophase? What might happen if it did not do so? How many chromosomes does a healthy human cell contain?

Task #3: Metaphase

How can someone easily tell whether cells are in metaphase (Hint: its really easy!)? What pulls the chromosomes apart at the end of metaphase?

Task #4: Anaphase

What is a “daughter chromosome”? What might happen if the chromosomes do not separate properly during anaphase? Give an example of a disease that results from incorrect separation.

Task #5: Telophase

What are “daughter cells”? Are they different or identical? Why? What is the main event that indicates that a cell is in telophase?

Task #6: After Mitosis

What is the process called cytokinesis? What happens to cells immediately after telophase ends?